

# **NATIONAL PRIORITIES LIST (NPL)**

\*\*\*Proposed/Final Site\*\*\*

October 2013

# MACMILLAN RING FREE OIL Norphlet, Arkansas

Union County

#### Site Location:

MacMillan Ring Free Oil is an abandoned refinery located in Norphlet, Union County, Arkansas. The facility is bordered by a residential subdivision and the Norphlet Public School on the west, Hayes Creek on the north and east, and Massey Creek and bottomlands associated with the creek to the southwest.

#### △ Site History:

The site operated as a crude oil refinery and manufacturer of lubrication oil and asphalt products as early as 1929. MacMillan Ring-Free Oil Refinery closed in 1987. The facility was inactive from 1987 until 1989, when the property was sold to Nor-Ark Industrial Corp (Nor-Ark) who used the on-site storage tanks for asphalt products until March of 1991, when the company filed for bankruptcy. The facility was refurbished by Norphlet Chemical as a chemical manufacturing plant in early 2004 to produce tetrafluoroethane (Freon 134A) refrigerant used in automobiles. The plant never operated as intended and failed to produce the product. In 2007 the facility was abandoned and has remained vacant. The site area is approximately 100 acres. The Arkansas Department of Environmental Quality (ADEQ) placed the site on the State Priority List under the Arkansas Pollution Control and Ecology Commission's Regulation No. 30 due to the potential for soil, surface water, and/or ground water contamination on- and off-site and the need to remediate the site to protective levels. The ADEQ conducted a Comprehensive Site Assessment which developed remedial alternatives ranging from 4 to 15 million dollars. Due to the large cost of the projected action, in November 2011 ADEQ referred the site to EPA for NPL consideration.

### **Site Contamination/Contaminants:**

Major site features include an office building, laboratory building, boiler building, a number of small aboveground storage tanks (ASTs), a fire-water pond, a canning building, and a drum storage building. Eleven large surface impoundments were previously located on the south side of the facility and the east side of the railroad tracks. These ponds have been backfilled, and are marked by open areas covered by sparse vegetation. Sampling results by EPA in 2012 indicate contamination of the surface and subsurface soil, ground water, and surface water/sediment. Contaminants of concern include polycyclic aromatic hydrocarbons (PAHs), TPH, and metals.

## \*\*\* Potential Impacts on Surrounding Community/Environment:

There are documented releases to both surface water and ground water. Sampling conducted by the EPA and ADEQ indicate that there may be as much as a foot of petroleum product underlying the facility. Currently there are several active seeps of waste discharging into surface drainage pathways and wetland areas north of the site. Without remediation of the site, additional releases to ground water, surface water and soil will continue to occur.

## Response Activities (to date):

Extensive assessment and removal actions were completed at MacMillian in the early 1990's addressing free liquids in the impoundments and active releases to surface water. Wastes were treated on-site and treated materials were used to backfill the impoundments. In April 2009, an EPA removal action of tanks containing anhydrous hydrofluoric acid (AHF) and AHF mixtures was conducted; these tanks were associated with Norphlet Chemical operations.

#### **■ Need for NPL Listing:**

The site was referred to EPA in 2011 from the ADEQ. The State of Arkansas does not have the funds to remediate this site and feels without listing the site contamination will continue to pose a risk to human health and the environment. The EPA received a letter of support for placing this site to the NPL from the state of Arkansas.

[The description of the site (release) is based on information available at the time the site was evaluated with the HRS. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at <a href="http://www.atsdr.cdc.gov/toxfaq.html">http://www.atsdr.cdc.gov/toxfaq.html</a> or by telephone at 1-888-42-ATSDR or 1-888-422-8737.